

REMARKS

This application has been reviewed in light of the Office Action mailed May 12, 2009. Reconsideration of this application in view of the below remarks is respectfully requested. Claims 1 – 8, 22 – 25, 38 – 41, 46 – 58, 71 – 75, 84 and 85 are pending in the application with Claims 22 – 25, 38 – 41 and 46 – 49 having been previously withdrawn. By way of the present amendment Claims 5 – 8, 53, 74, 75 and 84 are amended and Claims 55 – 58 and 71 – 73 are canceled. No new subject matter is introduced into the disclosure by way of the present amendment.

I. Objection to Claims 5 – 8 and 53

Claims 5 – 8 and 53 are objected to because each claim recites “each component below each coefficient” or “each coefficient below each component”, however the meaning of below is allegedly unclear. In response, Claims 5 – 8 and 53 are amended in an effort to clarify the recited feature by removing the alleged vague phrasing.

Accordingly, Applicant respectfully requests withdrawal of the objection with respect to Claims 5 – 8 and 53.

II. Rejection of Claims 1 – 8 and 50 – 58, 71 – 75 and 84 Under 35 U.S.C. § 101

Claims 74, 75 and 84 are rejected under 35U.S.C. § 101 because the claims are allegedly directed to non-statutory subject matter, namely a program. In response, the preambles of Claims 74, 75 and 84 are amended to recite a computer-readable medium.

Additionally, Claims 1 – 8 and 50 – 54 are rejected under 35 U.S.C. § 101 because, according to the present Office Action, the recited encoding and decoding devices are disclosed in the specification as computer programs. Therefore, since computer software is non-statutory subject matter, Claims 1 – 8 and 50 – 54 are also directed to non-statutory subject matter.

However, the cited passage in the specification states that the encoding and decoding devices can be implemented by a CPU executing control programs, as well as hardware. (See: page 64, lines 16 – 18). Thus, it is clear to one of ordinary skill in the art that in both cases hardware is being used for the implementation of the encoding and decoding devices.

In the first implementation a CPU provides the hardware which executes a set of control programs for providing the functionality. Consequently, the encoding and decoding devices refer to a CPU and control programs as a whole. Therefore the claims are statutory since a CPU is a physical device. It is clear that by inclusion of the term “device”, neither the claims nor the specification contemplate disembodied instructions.

Further, Claims 55 – 58 and 71 – 73 are rejected under 35 U.S.C. § 101 because, according to the present Office Action, the claims do not fall within one of the four statutory categories of invention. Specifically, the Examiner notes that under Supreme Court precedent a statutory process under 35 U.S.C. § 101 must either be tied to a particular machine or apparatus, or transform a particular article to a different state or thing.

However, by way of the present amendment, Claims 55 – 58 and 71 – 73 are canceled, thus rendering the rejection with respect to these claims moot.

Therefore, for at least the reasons presented above, Claims 1 – 8 and 50 – 54, 74, 75 and 84 are believed to recite statutory subject matter. Accordingly, Applicant respectfully requests withdrawal of the rejection with respect to Claims 1 – 8 and 50 – 54, 74, 75 and 84 under 35 U.S.C. § 101.

III. Rejection of Claims 4, 6, 58 and 75 Under 35 U.S.C. § 102(e)

Claims 4, 6, 58 and 75 are rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent No. 6,788,811 issued to Matsuura et al. (hereinafter, “Matsuura”).

The present Office Action contends that Matsuura discloses Applicant's recited "...coefficient encoding means for encoding and concatenating the AC component coefficient sets obtained by transform by said two dimensional Haar wavelet transforming means, and generating a code sequence of a high frequency subband; [and] initial coefficient encoding means for encoding and concatenating a DC component as a lowest frequency subband, and generating the code sequence of the lowest frequency subband..."

However, Matsuura does not teach, or even suggest, that the encoding means disclosed therein are capable of generating a code sequence of a high frequency subband from the AC component coefficient sets; or generating the code sequence of the lowest frequency subband from the DC component.

Therefore, as demonstrated above, because Matsuura does not disclose each and every element recited in the present claims, Applicant respectfully submits that the rejection has been obviated. Accordingly, Applicants respectfully request withdrawal of the rejection with respect to Claims 4, 6, 58 and 75 under 35 U.S.C. § 102(e).

IV. Rejection of Claims 1 – 3, 5, 50 – 57, 71 – 74, 84 and 85 Under 35 U.S.C. § 103(a)

Claims 1 – 3, 5, 50 – 57, 71 – 74, 84 and 85 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over Matsuura in view of "Wavelet Image Coding Using Power Adaptive Vector Quantization", Matsumura et al., Proc. Picture Coding Symposium (PCSJ95), October 1995, pp 121 – 122, Abstract (hereinafter, "Matsumura").

The present Office Action concedes that Matsuura does not disclose extracting, or decoding, sets of AC-component coefficients for every predetermined number of sets of coefficients which belong to the same spatial position, as recited in Claims 1, 50, 55, 71, 74, 84

and 85. However, the present Office Action incorrectly asserts that Matsumura discloses Applicant's coefficient extracting means/step.

Rather, Matsumura discloses decomposing an image into seven subband images and forming two kinds of vectors. The abstract of Matsumura does not disclose or suggest that the samples selected to form the vectors are AC-component coefficients that belong to the same spatial position. In fact, FIG. 1 in Matsumura shows selection of samples that decidedly do not have the same spatial position.

Moreover, Matsumura fails to overcome the deficiencies in Matsuura, noted above, regarding generating a code sequence of a high frequency subband from the AC component coefficient sets; or generating the code sequence of the lowest frequency subband from the DC component, as recited in Claims 1, 4, 55, 58, 74, 75 and 85.

Therefore, for at least the reasons presented above, Claims 1 – 3, 5, 50 – 57, 71 – 74, 84 and 85 are believed to be allowable over the cited prior art references. Accordingly, Applicant respectfully requests withdrawal of the rejection with respect to Claims 1 – 3, 5, 50 – 57, 71 – 74, 84 and 85 under 35 U.S.C. § 103(a) over Matsuura in view of Matsumura.

V. Rejection of Claims 7 and 8 Under 35 U.S.C. § 103(a)

Claim 7 is rejected under 35 U.S.C. § 103(a) as allegedly obvious over Matsuura in view of Matsumura and further in view of U.S. Patent No. 7,120,306 issued to Okada; and Claim 8 is rejected under 35 U.S.C. § 103(a) as allegedly obvious over Matsuura in view of Okada.

However, Okada fails to overcome the deficiencies identified above with respect to Matsuura and/or Matsumura. Claims 7 and 8 depend from independent Claims 1 and 4, respectively, and thus include all the features recited in those independent claims. Therefore, Okada, Matsuura and Matsumura, taken alone or in any proper combination, do not disclose or

suggest the features recited in Applicant's Claims 7 and 8. Accordingly, Applicant respectfully requests withdrawal of the rejection with respect to Claims 7 and 8 under 35 U.S.C. § 103(a) over Matsuura in view of Okada and/or Matsumura.

CONCLUSIONS

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1 – 8, 50 – 54, 74, 75, 84 and 85 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicant's undersigned attorney at the number indicated below.

Respectfully submitted,



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